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10/708,510

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EXAMINER

BUCHANAN, CHRISTOPHER R

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/708,510	<b>Applicant(s)</b> VINCENT ET AL.	
	<b>Examiner</b> CHRISTOPHER R. BUCHANAN	<b>Art Unit</b> 3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 21-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-17 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burnard et al. (U.S. patent 6,684,119) alone.

Regarding claims 1, 21, and 23, Burnard discloses a computer-implemented method to facilitate controlling inventory within a manufacturing plant having a number of workstations working in concert to manufacture a product from supplied materials (assembly line makes products, col. 3 line 15-22), wherein the plant maintains an inventory of materials and parts (parts are materials, col. 3 line 20) for manufacturing the product (abstract, col. 3 line 10+) the method including:

associating each unit of inventory (i.e., parts, materials) with identification data, location data, and operational needs data, (col. 3, lines 49-52), the operation needs data representing a quantity of parts needed to maintain forecasted plant manufacturing demands (adjusting material replenishment to avoid outage, col. 6 line 27-42),

storing inventory data at a common base station (material tracking system includes material storage system, col. 3 lines, 54-56), the inventory data representing units of inventory according to their identification, location, and operational needs data,

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transmitting signals representative of a parts search request from a user to the base station (signal sent from the tracking system for needed material located in storage area, col. 6 line 54-62) the request representing a need to locate a part from the inventory,

processing the signals with the inventory data to obtain a search result, the result representing the identification and location for the inventory part matching the search request (parts must be located before they can be delivered to assembly line, col. 3 line 55-62), and

transmitting the search results to the user, the results including a location of the part in the plant (parts must be located before they can be delivered to assembly line col. 3, lines 55-62).

The method of Burnard differs from the instant invention in that the inventory of parts is not shown to include spare parts used for repairing broken down workstations.

However, the particular identity and intended use of the items in the inventory do not affect the nature or functioning of the invention and do not solve any stated problem or serve any particular purpose. Thus, the identify and intended use of the inventory items (eg., spare parts for repairing broken workstations) would be matters of design choice.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Burnard to include spare parts for repairing broken workstations in the inventory, as suggested by design choice, to provide a means for organizing and locating these parts in the inventory.

As of claim 2, Burnard discloses the method of claim 1 further comprising decentralizing the spare parts inventory by dispersing the spare parts throughout the different workstation locations in the manufacturing plant by stating that frequently, the material received from the supplier is moved directly to the line not to the storage unit to reduce handling explaining a decentralized system (col. 1, lines 29-31), and discloses making a selection or request by the user to implement the replenishment process (col. 4, lines 46-47) for locating and retrieving the dispersed spare parts by transmitting search requests to the base station. However, Burnard discloses the method of lean manufacturing which relies on communication of information between the assembly line and the supplier (col. 1, lines 53-55). Burnard further discloses the goal of lean manufacturing by having the right material at the assembly plant locations, at the right time based on actual built information not on estimates and advantageously manage in-plant material inventory (col. 2, lines 51-56). This replenishment process will avoid material outage or overage supply (col. 6, lines 38-39). It would have been obvious to one of ordinary skill in the art at the time of the invention to consider the base station as the storage system and the material handler efficiently delivering the single component part or container of many component parts from the storage area to the assembly line at different locations based on actual or predicted usage information. By using the transfer method of similar parts from one location of excessive level to another location of lower than optimal level. It is obvious that the process occurs by a search order or request to check the inventory data at the storage area or base station as explained by Burnard.

As of claim 3 and 22, Burnard does not exactly disclose the method of claim 2 wherein dispersing the spare parts comprises checking out the spare parts from a plant crib; Burnard teaches about a material handler to deliver the component parts from the storage area to the assembly line (col. 3, lines 60-63), and further teaches about the identification and location data associated with the spare parts when checked out by stating that the replenishment information is provided for each component part assembled on the specific product (col. 4, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to consider that dispersing means distributing after checking out or requesting delivery of component parts along with the information pertinent to the specific component part, to be delivered to the right location or workstation on the assembly line after consent or message allowed by the material tracking system.

As of claim 4, Burnard discloses the method of claim 1 further comprising associating vendor data with each spare part, where the vendor is the supplier who has access to component or spare part usage data from multiple manufacturing or assembly plant locations (col. 2, lines 44-45), and further discloses the vendor data stored with the inventory data for representing vendors to be used for purchasing new spare parts by explaining the advantage where the supplier can manage their own in-plant material inventory and implement lean manufacturing strategies for dynamic material replenishment (col. 2, lines 55-57), and further teaches the search result also representing the vendor data where the dynamic material replenishment information as

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a result of a request to replenish component parts, where vendors or suppliers are offered access to usage data of parts at multiple assembly line locations (col. 2, line 25-26), where lean manufacturing relies on communication of information between the manufacturing plant and the supplier (col. 1, lines 53-56), among it sharing available inventory to maintain minimal to optimal level of inventory (col. 1, lines 27-29).

As of claim 5, Burnard does not disclose the method of claim 3 further comprising purchasing new spare parts through a blanket purchase order represented in the vendor data, but teaches that a supplier will ship extra material to the plant in order to protect the plant from a material shortage, which reduces the effectiveness of lean manufacturing, and extra related costs will result from a quick reaction by the supplier or vendor to variations in the manufacturing schedule (col. 1, lines 43-52), which for one of ordinary skill in the art will deduce an obvious interruption in the supplier inventory database.

As of claim 6, Burnard discloses the method of claim 1 further comprising associating key contact data with each spare part, by selecting the component or spare part from the list of materials for obtaining tracked real time material usage information by the user (col. 8, lines 4-6), and further discloses the key contact data stored with the inventory data for representing persons within the manufacturing plant responsible for controlling removal of spare parts from the work stations associated with each location data, by identifying a user includes the step of checking a user identification code to

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determine permission to access the material usage information, although Burnard does not explicitly disclose the removal of spare parts, but mentions delivery from the storage area to the assembly line by a material handler (col. 3, lines 60-63), and mentions a material carrier who transports material between the supplier and the assembly plant with the use of the associated information (col.6, lines 41-43), and Burnard teaches the search result also representing the key contact data as allowing the user to use the tracked real-time material usage in replenishing the material to the selected manufacturing plant (col. 8, line 67 and col. 9, lines 1-2). It would be obvious for someone of ordinary skill in the art to consider removing parts within an assembly line and keeping the inventory updated within the tracking system and updating the usage information for each spare part as far as the fields pertinent to location and the user identification code.

As of claim 7, Burnard discloses the method of claim 1 further comprising processing in the base station the inventory data for automatically generating a usage report; as the material tracking system which includes a material storage system and operatively in communication with it (col. 3, lines 54-56) and further discloses the material tracking system maintaining a database containing relevant usage information for each component part used in assembling the product (col. 3, lines 48-50).

As of claim 8, Burnard discloses the method of claim 7 wherein generating the usage report comprising representing parts needed by using the tracked real-time material usage information by the user in replenishing the spare part or parts to the selected



assembly plant or location within (col. 8, lines 16-18), and Burnard further discloses the parts need representing only the spare parts having available quantities which are less than the quantity needed for the desired plant manufacturing levels by allowing a user to select one or more component part to obtain real-time usage information from a displayed list (col. 6, lines 15-18) and further explains that the supplier uses the usage information and adjusts the component parts replenishment in order to avoid outage conditions (col. 6, lines 38-39).

As of claim 9, Burnard discloses the method of claim 7 wherein generating the usage report relates to an excessive usage by using the tracked real-time material usage information by the user in replenishing the spare part or parts to the selected assembly plant or location within (col. 8, lines 16-18), and Burnard further discloses the excessive usage representing only the spare parts having available quantities which are greater than the quantity needed for the desired plant manufacturing levels by allowing a user to select one or more component part to obtain real-time usage information from a displayed list (col. 6, lines 15-18) and further explains that the supplier uses the usage information and adjusts the component parts replenishment in order to avoid overage conditions (col. 6, lines 38-39).

As of claim 10, Burnard discloses the method of claim 7 wherein generating the usage report relates to a historical usage by designating that the material tracking system maintains a database containing relevant usage information for each component part used in assembling the product such as time and date of usage among other

identification information (col. 3, lines 48-53), and further discloses the historical usage representing usage of the spare parts relative to the operational needs data and a historical period of time by selecting a time range for which the supplier wishes to view, through a display, the usage relevant to its own business needs (col. 6, lines 23-26).

As of claim 11, Burnard discloses the method of claim 7 wherein generating the usage report relates to a critical parts list by displaying a list of component parts, with real time usage information, on the display device (col. 6, lines 15-17), the critical parts list representing spare parts critical to the operational needs data; where Burnard discloses the particular list by selecting the component parts from the list of materials for obtaining tracked real-time material usage information by the user (col. 8, lines 4-6).

As of claim 12, Burnard discloses the method of claim 1 further comprising retrieving a spare part from one of the workstations based on the location data by claiming a material tracking device to acknowledge use of a component part on an assembly line (col. 10, lines 1-3), returning a bar code card to a drop-box for indicating retrieval of the spare part by mentioning that the material tracking device is a card reader or bar code reader (col. 3, lines 27 and 32), the bar code card including the identification and location data for the spare part by mentioning the card reader reads a bar code card or material inventory card included in a container of material or component parts and removed at a certain point (col. 3, lines 33-34), scanning the bar code card and transmitting signals representing bar code data to the base station by reading an affixed bar code label on a container or component part being (col. 3, lines 33-34) in

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communication with the material storage system comprised in the material tracking system (col. 3, lines 54-56), processing the signals for automatically updating in the base station the available quantity of the retrieved spare part by Burnard stating reception of a signal by the material inventory storage system from the material tracking system indicating requirement of a component part at the assembly line (col. 3, lines 56-60) and real time usage information is dynamically updated as material or component parts are used on the product at the assembly line ( col. 5, lines 27-29).

As of claim 13, Burnard discloses the method of claim 1 further comprising storing inventory data for multiple manufacturing plants, transmitting signals representing a plant or global search, the plant search restricted to the plant originating the signals and spare parts located therein, the global plant search including each of the multiple manufacturing plants and spare parts located therein by stating and providing dynamic production material replenishment information and tracking real-time usage of material or component parts used for a product at a plurality of manufacturing plants and replicating it on a global business network in communication with the local business network (claim 1).

As of claim 14, Burnard discloses the method of claim 1 wherein the location data includes a plant name by selecting one of the assembly plants (col. 7, line 65), but does not exclusively disclose a department name, a workstation location, and a drawer position, but mentions the assembly line which would be obvious for someone of ordinary skill in the art at the time of the invention to add fields on the usage information

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display or report containing locations and sub-locations pertinent to the assembly line and part of the material replenishment system, and Burnard discloses an operator name by identifying if a user has permission to access the material usage information (col. 7, lines 1-2).

As of claim 15, Burnard discloses the method of claim 14 further comprising transmitting a signal representing a security data with the search request, the security data representing which location data are represented in the search result by mentioning the advantage of providing dynamic material replenishment information includes web site security so that only the actual supplier of material can access the part usage information (col. 2, lines 46-49).

As of claim 16, Burnard discloses the method of claim 1 wherein the identification data, as being the information contained in the database (col. 3, line 51), includes a keyword, a part description, a remark, a manufacturer part number, a vendor part number, a barcode number, a vendor name, a vendor contact link, a unit cost, a critical designation, and a blue print number, where Burnard discloses among other information a part number, a supplier identification code (col. 3, lines 51- 52), a barcode label (col. 3, line 33), a supplier computer network (col. 8, line 46). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the extra fields mentioned among the information pertinent to the database maintained by the material tracking system.

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As of claim 17, Burnard discloses the method of claim 1 further comprising providing multiple computers within the manufacturing plant by stating that the material tracking computer system includes a plurality of local computers (col. 3, lines 45-46), and Burnard further discloses the multiple computers usable by each plant employee for searching for spare parts by stating that as the particular component part is installed on a manufactured product, it is tracked and maintained on the local computer network within the assembly plant for the assembly line (col. 5, lines 20-23), and further discloses each computer includes a graphical user interface to facilitate transmitting and receiving signals from the base station and also to display the search results to the user by stating that the global business network is a centralized server in communication with the local computer network (col. 4, lines 9-10), and is referred to as a host web site providing interactive communication with a visitor or so called user on the assembly line (col. 4, lines 40-43), the communication is facilitated by a series of displayed pages on the display screen whereby users may interact by making selections or requests of component parts from their local computer terminal (col. 4, lines 46-47).

### ***Response to Arguments***

3. Applicant's arguments filed October 23, 2008 have been fully considered but they are not persuasive. Applicant argues that the prior art references do not disclose all the recited features of the claimed invention, in particular, the feature of maintaining and tracking an inventory of spare parts used to repair broken workstations.

The examiner disagrees and stands by the rejection. The points of applicant's arguments have been addressed in detail in the rejection above. In the examiner's view, the particular identity and intended use of the items in the inventory do not affect the nature or functioning of the invention would be matters of design choice.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER R. BUCHANAN whose telephone

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number is (571)272-8134. The examiner can normally be reached on Mon.-Fri. 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ryan Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. R. B./  
Examiner, Art Unit 3627

/F. Ryan Zeender/  
Supervisory Patent Examiner, Art Unit 3627